

- Group I: Claims 1, 2 (both in part), 3, 5 (in part), and 6, drawn to a mixture of recombinant cells expressing a nuclear receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group II: Claims 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a chemoattractant peptide receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group III: Claims, 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a neuropeptide receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group IV: Claims 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a light receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group V: Claims 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a neurotransmitter receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group VI: Claims 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a cyclic AMP receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group VII: Claims 1, 2, 4, 5, 7-19, 23-29, 35-42, and 49-53 (all in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a polypeptide hormone receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group VIII: Claims 1, 2, 4, 5, 7-17 (all in part), 20, 21, 23-27 (in part), 30, 31, and 35-39 (in part), 43-45, and 49-53 (in part) drawn to a mixture of recombinant cells expressing in a cell surface receptor, a receptor tyrosine kinase receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.

- Group IX: Claims 1, 2, 4, 5, 7-17 (all in part), 22, 23-27 (in part), 32, 35-39 (in part), 48, and 49-53 (in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, an orphan receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2
- Group X. Claims 1, 2, 4, 5, 7-17, 23-27 (all in part), 33, 35-39 (in part), 46, and 49-53 (in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, a cytokine receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.
- Group XI: Claims 1, 2, 4, 5, 7-17, 23-27 (all in part), 34, 35-39 (in part), 47, and 49-53 (in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, an MIRR receptor protein, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2.

Applicants are required to elect one of the above groups for prosecution on the merits.

Applicants respectfully traverse the requirements for restriction and election, and submit that the requirements are improper. First, Applicants assert that the subject matter of these groups represent different embodiments of a single inventive concept for which a single patent should issue. The pending claims represent an intricate web of knowledge, continuity of effort, and consequences of a single invention, which merit examination of all of these claims in a single application. More particularly, a single, searchable, unifying aspect, *i.e.*, a mixture of recombinant cells, each expressing a heterologous receptor protein having signal transduction activity and a heterologous potential polypeptide effector of the receptor, links all of the claims.

Moreover, the patent statutes require that Applicants disclose how to make and use the compounds of the invention. It is only reasonable, then, that Applicants be allowed to prosecute the compounds and the methods for using the compounds in a single application. Therefore, it is improper to require that the subject matter of these groups be prosecuted in separate patent applications.

Second, Applicants submit that a sufficient search and examination with respect to the subject matter of all claims can be made without serious burden. As the M.P.E.P. states:

[i]f the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though it includes claims to independent or distinct inventions. M.P.E.P. § 803 (7th ed., Rel. 78A, March 1999).

That is, even if the above-enumerated groups of claims are drawn to distinct inventions, the Examiner must still examine the entire application on the merits because doing so will not result in a serious burden.

Applicants submit that the search and examination of all the claims will have substantial overlap, and no serious burden will result from searching and examining all claims in the same application. This is especially true inasmuch as Groups I-XI have exactly the same classification, class, and subclass; i.e., Groups I-XI are all classified in class 435, subclasses 325, 252.3, 254.11, and 254.2. In view of this exact identity of classifications, and the data bases and powerful search engines available to the Examiner, there would be no serious burden in examining all the claims in a single application.

The Office Action, in item 3 on page 4, indicates that the inventions are distinct because they "have acquired a separate status in the art because of their divergent subject matter". This is nothing more than an unsupported conclusion, as the Office Action proffers nothing to support this statement. In fact, the Patent Office itself does not consider the inventions as having acquired a separate status in the art, given that the Office has classified all the claims identically.

Applicants also note that although a restriction requirement was issued in the parent application, the claims were divided into only two groups: Group I (Claims 1-53 drawn to mixture of recombinant cells); and Group II (Claims 54-76, drawn to a method for identifying receptor effectors). Applicants elected Group I in the first application. Applicants are now confused as to why, in the instant application, what was considered a single group in the parent application (Group I) is now eleven groups. Applicants are not aware of any substantive changes

in the law of restriction practice that would warrant eleven groups in the instant application when the same claims only resulted in a single group in the parent application.

Indeed, it would be extremely burdensome and expensive for Applicants to have to file eleven different patent applications. Therefore, in the interest of savings of time and cost to Applicants and the Patent Office, Applicants respectfully request that all the claims be rejoined and searched and examined in a single application.

Nevertheless, in compliance with the directives in the Office Action and in order to expedite prosecution of the instant application, Applicants hereby elect, subject to the foregoing traverse, Group IX, claims 1, 2, 4, 5, 7-17 (all in part), 22, 23-27 (in part), 32, 35-39 (in part), 48, and 49-53 (in part), drawn to a mixture of recombinant cells expressing a cell surface receptor, an orphan receptor, classified in class 435, subclasses 325, 252.3, 254.11, and 254.2. Applicants, in accordance with item 5 on page 4 of the Office Action, further elect, subject to the foregoing traverse, the following: a fluorescent detectable signal (claims 10, 12-16, and 27); β -galactosidase (claim 11); and yeast cells (claims 23, 24, 35-38 and 49-52). Group IX does not read on claims 42 or 45.

If a telephone conversation with Applicants' attorney would help expedite the prosecution of the above-identified application, the Examiner is urged to call the undersigned attorney at (617) 227-7400.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'HATHAWAY PEASE', written over a horizontal line.

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